

Title (en)

Semiconductor integrated circuit device.

Title (de)

Integrierte Halbleiterschaltungsanordnung.

Title (fr)

Dispositif de circuit intégré à semi-conducteur.

Publication

EP 0563921 A2 19931006 (EN)

Application

EP 93105341 A 19930331

Priority

- JP 10595792 A 19920331
- JP 35362692 A 19921214

Abstract (en)

In an integrated circuit device using a plurality of different power supply voltages, the application of an input voltage exceeding the power supply voltages to an input/output circuit is prevented. When a p-type substrate is used, a plurality n-wells are formed to surround an integrated circuit region on a central portion of the substrate. When an n-type substrate is used, a plurality of p-wells are formed in the same manner. A predetermined power supply voltage is applied to each well to select transistors of the input/output buffer in accordance with the voltage level of an external voltage.
<IMAGE>

IPC 1-7

H01L 27/02; H01L 27/118

IPC 8 full level

H01L 21/8238 (2006.01); **H01L 21/822** (2006.01); **H01L 27/02** (2006.01); **H01L 27/04** (2006.01); **H01L 27/092** (2006.01); **H01L 27/118** (2006.01)

CPC (source: EP KR US)

H01L 24/06 (2013.01 - EP US); **H01L 27/0218** (2013.01 - EP US); **H01L 27/04** (2013.01 - KR); **H01L 27/11898** (2013.01 - EP US);
H01L 2224/05554 (2013.01 - EP US); **H01L 2924/13091** (2013.01 - EP US); **H01L 2924/14** (2013.01 - EP US)

C-Set (source: EP US)

H01L 2924/14 + H01L 2924/00

Cited by

EP1638145A1; US6518628B1; US7543249B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0563921 A2 19931006; EP 0563921 A3 19940504; EP 0563921 B1 19991222; DE 69327357 D1 20000127; DE 69327357 T2 20000608;
JP 3228583 B2 20011112; JP H05335502 A 19931217; KR 930020662 A 19931020; KR 970004454 B1 19970327; US 5347150 A 19940913

DOCDB simple family (application)

EP 93105341 A 19930331; DE 69327357 T 19930331; JP 35362692 A 19921214; KR 930005052 A 19930330; US 3966693 A 19930330